

Chart #	Abbrev.	Name
1	GLC	α -D-Glucose
2	G6P	Glucose 6-phosphate
3	F6P	Fructose 6-phosphate
4	FDP	Fructose 1,6-diphosphate
5	T3P2/DHAP	Dihydroxyacetone phosphate
6	T3P1	Glyceraldehyde 3-phosphate
7	13PDG	1,3-bis-Phosphoglycerate
8	3PG	3-Phosphoglycerate
9	2PG	2-Phosphoglycerate
10	PEP	Phosphoenolpyruvate
11	PYR	Pyruvate
12	ACCOA	Acetyl-CoA
13	CIT	Citrate
14	ACO	<i>cis</i> -Aconitate
15	ICIT	Isocitrate
16	AKG	α -Ketoglutarate
17	SUCCOA	Succinate CoA
18	SUCC	Succinate
19	FUM	Fumarate
20	MAL	Malate
21	OA	Oxaloacetate
22	ACAL	Acetaldehyde
23	ACTP	Acetyl-phosphate
24	ETH	Ethanol
25	AC	Acetate
26	LAC	D-Lactate
27	FORMATE	Formate
28	D6PGL	D-6-Phosphate-glucono-delta-lactone
29	D6PGC	D-6-Phosphate-gluconate
30	RL5P	Ribulose 5-phosphate
31	X5P	Xylulose-5-phosphate
32	R5P	Ribose 5-phosphate
33	S7P	sedo-Heptulose
34	E4P	Erythrose 4-phosphate
35	GLX	Glyoxylate
36	NADH	Nicotinamide adenine dinucleotide reduced
37	NADPH	Dihyronicotinamide adenine dinucleotide phosphate reduced
38	HEXT	External H ⁺
39	Q	Ubiquinone
40	FADH	Flavin adenine dinucleotide reduced
41	ATP	Adenosine triphosphate
50	G1P	Glucose 1-phosphate
75	GL3P	Glycerol 3-phosphate
104	CO2	Carbon dioxide
390	β DGLC	β -D-Glucose
391	OTHIO	Thioredoxin (oxidized form)
391	RTHIO	Thioredoxin (reduced form)
392	GLYCOGEN	Glycogen
403	ADPGLC	ADP-Glucose

413	GLAL	D-Glyceraldehyde
416	2KD6PG	2-keto-3-deoxy-6-phospho-gluconate
1	GLC	α -D-Glucose
2	G6P	Glucose 6-phosphate
3	F6P	Fructose 6-phosphate
4	FDP	Fructose 1,6-diphosphate
5	T3P2/DHAP	Dihydroxyacetone phosphate
6	T3P1	Glyceraldehyde 3-phosphate
22	ACAL	Acetaldehyde
29	D6PGC	D-6-Phosphate-gluconate
30	RL5P	Ribulose 5-phosphate
31	X5P	Xylulose-5-phosphate
32	R5P	Ribose 5-phosphate
42	SUC6P	Sucose 6-phosphate
43	FRUC	Fructose
44	MELI	Melibiose
45	LCTS	Lactose
46	GLAC	Galactose
47	GAL1P	Galactose 1-Phosphate
48	UDPG	UDP Glucose
49	UDPGAL	UDP Galactose
50	G1P	Glucose 1-phosphate
51	DR1P	Deoxyribose 1-Phosphate
52	DR5P	Deoxyribose 5-Phosphate
53	TRE6P	Trehalase 6-phosphate
54	bDG6P	β -D-Glucose 6-Phosphate
55	FUC	Fucose
56	FCL	Fuculose
57	FCL1P	Fuculose 1-Phosphate
58	LACAL	Lactaldehyde
59	12PPD	1,2-Propanediol
60	LLAC	L-Lactate
61	RMN	Rhamnose
62	RML	Rhamnulose
63	RML1P	Rhamnulose 1-phosphate
64	GLTL1P	Galacitol-1-Phosphate
65	TAG6P	Tagatose-6-phosphate
66	TAG16P	Tagatose-1,6 diphosphate
67	ARAB	Arabinose
68	RBL	Ribulose
69	F1P	Fructose 1-Phosphate
70	MNT6P	Mannitol 6-Phosphate
71	MAN1P	Mannose 1-Phosphate
72	R1P	Ribose 1-phosphate
73	RIB	Ribose
74	GL	Glycerol
75	GL3P	Glycerol 3-phosphate
76	SOR1P	Sorbose 1-phosphate
77	GLT6P	Glucitol 6-Phosphate
78	NAGP	N-Acetylglucosamine

79 GA6P	D-Glucosamine
80 XYL	Xylose
81 XUL	Xylulose
82 GLCN	Gluconate
390 βDGLC	β-D-Glucose
394 MAN6P	Mannose 6-Phosphate
8 3PG	3-Phosphoglycerate
10 PEP	Phosphoenolpyruvate
11 PYR	Pyruvate
12 ACCOA	Acetyl-CoA
16 AKG	α-Ketoglutarate
18 SUCC	Succinate
19 FUM	Fumarate
21 OA	Oxaloacetate
32 R5P	Ribose 5-phosphate
34 E4P	Erythrose 4-phosphate
83 ASP	Aspartate
84 ASN	Asparagine
85 GLU	Glutamate
86 GLN	Glutamine
87 ALA	Alanine
88 VAL	Valine
89 DALA	D-Alanine
90 NAGLU	N-Acetyl glutamate
91 NAGLUYP	N-Acetyl glutamyl -phosphate
92 NAGLUSAL	N-Acetyl glutamate semialdehyde
93 NAARON	N-α-Acetyl ornithine
94 ORN	Ornithine
95 CITR	L-Citrulline
96 ARGSUCC	L-Arginio succinate
97 ARG	Arginine
98 AGM	Agmatine
99 PTRC	Putrescine
100 SPMD	Spermidine
101 GABAL	γ-aminobutyraldehyde
102 GABA	4-Aminobutanoate
103 SUCCSAL	Succinate semialdehyde
104 CO2	Carbon dioxide
105 CAP	Carbamoyl phosphate
106 OBUT	Oxobutyrate
107 ABUT	2-Aceto-2-hydroxy butyrate
108 DHMVA	2,3-Dihydroxy-3-methyl-valerate
109 OMVAL	Oxomethylvalerate
110 ILE	Isoleucine
111 ACLAC	Acetolactate
112 DHVAL	Dihydroxy-isovalerate
113 OIVAL	Oxoisovalerate
114 CBHCAP	3-Carboxy-3-hydroxy-isocaproate
115 IPPMAL	3-Isopropylmalate
116 OICAP	2-Oxoisocaproate

117 LEU	Leucine
118 3DDAH7P	3-Deoxy-d-arabino heptulosonate-7-phosphate
119 DQT	3-Dehydroquinate
120 DHSK	Dehydroshikimate
121 SME	Shikimate
122 SME5P	Shikimate-5-phosphate
123 3PSME	3-Phosphate-shikimate
124 CHOR	Chorisimate
125 PHEN	Prephenate
126 HPHPYR	para-Hydroxy phenyl pyruvate
127 TYR	Tyrosine
128 PHPYR	Phenyl pyruvate
129 PHE	Phenylalanine
130 AN	Antranilate
131 NPRAN	N-5-phosphoribosyl-antranilate
132 CPAD5P	1-O-Carboxyphenylamino 1-deoxyribose-5-phosphate
133 IGP	Indole glycerol phosphate
134 TRP	Tryptophan
135 PRPP	Phosphoribosyl pyrophosphate
136 PRBATP	Phosphoribosyl-ATP
137 PRBAMP	Phosphoribosyl -AMP
138 PRFP	Phosphoribosyl-formimino-AICAR-phosphate
139 PRLP	Phosphoribosyl- formimino-AICAR-phosphate
140 DIMGP	D-Erythro imidazoleglycerol-phosphate
141 IMACP	Imidazole acetyl-phosphate
142 HISOLP	L-Histidinol-phosphate
143 HISOL	Histidinol
144 HIS	Histidine
145 AICAR	5-Phosphate-ribose-5-amino-4-imidazole carboxamide
146 PHP	3-Phosphohydroxypyruvate
147 3PSER	3-Phosphoserine
148 SER	Serine
149 GLY	Glycine
150 SLF	Sulfate
151 APS	Adenylyl sulfate
152 PAPS	3-Phosphoadenylyl sulfate
153 H2SO3	Sulfite
154 H2S	Hydrogen sulfide
155 PAP	Adenosine-3',5'-diphosphate
156 AMP	Adenosine monophosphate
157 ASER	O-Acetylserine
158 CYS	Cysteine
159 BASP	β -Aspartyl phosphate
160 ASPSA	Aspartic beta-semialdehyde
161 HSER	Homoserine
162 PHSER	O-Phospho-l-homoserine
163 THR	Threonine
164 2A3O	2-Amino-3-oxobutanoate
165 D23PIC	2,3-Dihydro dipicolinate
166 PIP26DX	Delta-piperidine-2,6-dicarboxylate

167 NS2A6O	N-Succinyl-2-amino-6-ketopimelate
168 NS26DP	N-Succinyl-L,L-2,6-diaminopimelate
169 D26PIM	L,L-2,6-Diamino pimelate
170 MDAP	Meso-diaminopimelate
171 LYS	L-Lysine
172 OSLHSER	O-Succinyl-L-homoserine
173 LLCT	L-Cystathionine
174 HCYS	Homocysteine
175 SAH	S-Adenosyl homocystine
176 MET	Methionine
177 SAM	S-Adenosyl methionine
225 GLUP	Glutaryl phosphate
226 GLUGSAL	L-Glutamate γ -semialdehyde
227 PRO	Proline
231 5MTRP	S5-Methyl-5-thio-D-ribose 1-phosphate
282 5MTA	5-Methylthioadenosine
382 5MTR	5-Methylthio-D-ribose
391 OTHIO	Thioredoxin (oxidized form)
391 RTHIO	Thioredoxin (reduced form)
395 CADV	Cadaverine
396 DSER	D-Serine
407 5MTR1P	5-Methylthio-5-deoxy-D-ribulose 1-phosphate
408 DKMPP	2,3-Diketo-5-methylthio-1-phosphopentane
409 KMB	α -keto- γ -methiobutyrate
412 DSAM	Decarboxylated adenosylmethionine
41 ATP	Adenosine triphosphate
83 ASP	Aspartate
105 CAP	Carbamoyl phosphate
135 PRPP	Phosphoribosyl pyrophosphate
145 AICAR	5-Phosphate-ribosyl-5-amino-4-imidazole carboxamide
156 AMP	Adenosine monophosphate
178 PRAM	5-Phosphate- β -D-ribosyl amine
179 GAR	5-Phosphate-ribosyl glycineamide
180 FGAR	5-Phosphoribosyl-n-formylglycineamide
181 FGAM	5-Phosphoribosyl-n-formylglycineamidine
182 AIR	5-Phosphoribosyl-5-aminoimidazole
183 NCAIR	5'-Phosphoribosyl-5-carboxyaminoimidazole
184 CAIR	5-Phosphoribosyl-5-aminoimidazole-4-carboxylate
185 SAICAR	5-Phosphoribosyl-4-(N-succinocarboxamide)-5-amino-imidazole
186 PRFICA	5-Phosphate-ribosyl-formamido-4-imidazole carboxamide
187 IMP	Inosine monophosphate
188 XMP	Xantosine monophosphate
189 GMP	Guanosine monophosphate
190 ASUC	Adenilsuccinate
191 CAASP	Carbamoyl aspartate
192 DOROA	Dihydroorotic acid
193 OROA	Orotic acid
194 OMP	Orotidylate
195 UMP	Uridine monophosphate
196 UDP	Uridine diphosphate

197	UTP	Uridine triphosphate
198	CTP	Cytidine triphosphate
215	GTP	Guanosine triphosphate
228	IDP	Inosine diphosphate
229	ITP	Inosine triphosphate
230	ADP	Adenosine diphosphate
232	DATP	Deoxyadenosine triphosphate
233	DADP	Deoxyadenosine diphosphate
234	DAMP	Deoxyadenosine monophosphate
235	DA	Deoxyadenosine
236	DIN	Deoxyinosine
237	ADN	Adenosine
238	AD	Adenine
239	INS	Inosine
240	HYXN	Hypoxanthine
241	XAN	Xanthine
242	XTSN	Xanthosine
243	GN	Guanine
244	GSN	Guanosine
245	GDP	Guanosine diphosphate
246	DGTP	Deoxyguanosine triphosphate
247	DGDP	Deoxyguanosine diphosphate
248	DGMP	2-Deoxy-guanosine-5-phosphate
249	DG	Deoxyguanosine
250	URI	Uridine
251	URA	Uracil
252	CYTS	Cytosine
253	CYTD	Cytidine
254	CMP	Cytidine monophosphate
255	CDP	Cytidine diphosphate
256	DCTP	Deoxycytidine triphosphate
257	DCDP	Deoxycytidine diphosphate
258	DCMP	Deoxycytidine monophosphate
259	DC	Deoxycytidine
260	DU	Deoxyuridine
261	DUMP	Deoxyuridine monophosphate
262	DUDP	Deoxyuridine diphosphate
263	DUTP	Deoxyuridine triphosphate
264	DTMP	Thymidine monophosphate
265	DTDP	Thymidine diphosphate
266	DTTP	Thymidine triphosphate
267	DT	Thymidine
268	THY	Thymine
5	T3P2/DHAP	Dihydroxyacetone phosphate
6	T3P1	Glyceraldehyde 3-phosphate
11	PYR	Pyruvate
16	AKG	α -Ketoglutarate
30	RL5P	Ribulose 5-phosphate
34	E4P	Erythrose 4-phosphate
83	ASP	Aspartate

85	GLU	Glutamate
87	ALA	Alanine
113	OIVAL	Oxoisovalerate
124	CHOR	Chorisimate
135	PRPP	Phosphoribosyl pyrophosphate
148	SER	Serine
158	CYS	Cysteine
182	AIR	5-Phosphoribosyl-5-aminoimidazole
199	4HBZ	4-Hydroxybenzoate
200	O4HBZ	3-Octaprenyl-4-hydroxybenzoate
201	2OPPP	2-Octaprenylphenol
202	2O6H	2-Octaprenol 6-hydroxyphenol
203	2OPMP	2-Octaprenyl-6-methoxyphenol
204	2OPMB	2-Octaprenyl-6-methoxy-1,4-benzoquinone
205	2OPMMB	2-Octaprenyl-3-methyl-6-methoxy-1,4-benzoquinone
206	2OMHMB	2-Octaprenyl-3-methyl-5-hydroxy-6-methoxy-1,4-benzoquinone
207	QH2	Ubiquinol
208	ICHOR	Isochorismate
209	SHCHC	2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate
210	OSB	O-Succinylbenzoic acid
211	OSBCOA	O-Succinylbenzoyl-CoA
212	DHNA	1,4-Dihydroxy-2-naphthoic acid
213	DMK	Demethylmenaquinone
214	MK	Menaquinone
215	GTP	Guanosine triphosphate
216	D6RP5P	2,5-Diamino-6-(ribosylamino)-4-(3H)-pyrimidinone 5'-phosphate
217	A6RP5P	5-Amino-6-(ribosylamino)-2,4-(1H,3H)-pyrimidinedione 5'-phosphate
218	A6RP5P2	5-Amino-2,6-dioxy-4-(5'-phosphoribitylamino)pyrimidine
219	A6RP	5-Amino-6-ribitylamino-2,4(1H,3H)-pyrimidinedione
220	DB4P	3,4-Dihydroxy-2-butanone-4-phosphate
221	D8RL	6,7-Dimethyl-8-(1-D-ribityl)lumazine
222	RIBFLV	Riboflavin
223	FMN	flavin mononucleotide
224	FAD	Flavin adenine dinucleotide
269	THF	Tetrahydrofolate
270	METTHF	5,10-Methylene tetrahydrofolate
271	MTHF	5-Methyl tetrahydrofolate
272	METHF	5,10-Methenyl tetrahydrofolate
273	FTHF	10-formyl-tetrahydrofolate
274	DHF	Dihydrofolate
296	OPP	trans Octaprenyl pyrophosphate
298	AHTD	2-Amino-4-hydroxy-6-(erythro-1-2-3-trihydroxypropyl) dihydropteridine-p
299	DHP	Dihydroneopterin
300	AHHMP	2-Amino-4-hydroxy-6-hydroxymethyl dihydropteridine
301	AHHMD	2-Amino-4-hydroxy-6-hydroxymethyl dihydropteridine-pp
302	ADCHOR	4-Amino-4-deoxychorismate
303	PABA	para-Aminobenzoic acid
304	DHPT	7,8-Dihydropteroate
305	AKP	α -Ketopantoate

306 PANT	Pantoate
307 PNTD	Pantothenate
308 4PPNTO	4'-Phosphopantothenate
309 4PPNCYS	4'-Phosphopantothencycysteine
310 4PPNTE	4'-Phosphopantetheine
311 DPCOA	Dephosphocoenzyme A
312 COA	Coenzyme A
313 ACP	Acyl carrier protein
314 bALA	β -Alanine
315 ISUCC	α -Iminosuccinate
316 QA	Quinolate
317 NAMN	Nicotinic acid mononucleotide
318 NAAD	Nicotinic acid adenine dinucleotide
319 NAD	Nicotinamide adenine dinucleotide
320 NADP	Nicotinamide adenine dinucleotide phosphate
321 NMN	Nicotinamide mononucleotide
322 NAm	Nicotinamide
323 NAC	Nicotinic acid
324 GTRNA	L-Glutamyl-tRNA(glu)
325 GSA	Glutamate-1-semialdehyde
326 ALAV	D-Aminolevulinate
327 PBG	Probilinogen III
328 HMB	Hydroxymethylbilane
329 UPRG	Uroporphyrinogen III
330 PC2	Percorrin 2
331 SHCL	Sirohydrochlorin
332 SHEME	Siroheme
333 CPP	Coproporphyrinogen III
334 PPHG	Protoporphyrinogen
335 PPIX	Protoporphyrin IX
336 PTH	Protoheme
337 HO	Heme O
338 AONA	8-Amino-7-oxononanoate
339 DANNA	7,8-Diaminononanoate
340 DTB	Dethiobiotin
341 BT	Biotin
342 GC	L- γ -Glutamylcysteine
343 RGT	Reduced glutathione
344 AHM	4-Amino-5-hydroxymethyl-2-methylpyrimidine
345 AHMP	4-Amino-5-hydroxymethyl-2-methylpyrimidine-phosphate
346 AHMPP	4-Amino-5-hydroxymethyl-2-methylpyrimidine-pyrophosphate
347 DTP	1-Deoxy-d-threo-2-pentulose
348 THZ	4-Methyl-5-(beta-hydroxyethyl)thiazole
349 THZP	4-Methyl-5-(beta-hydroxyethyl)thiazole phosphate
350 THMP	Thiamine-phosphate
351 THIAMIN	Thiamin
352 TPP	Thiamine-pyrophosphate
353 ER4P	Erythronate-4-phosphate
354 OHB	3-Hydroxy-4-phospho-hydroxy-alpha-ketobutyrate
355 PHT	Phospho-hydroxy-threonine

356 P5P	Pyridoxine-5'-phosphate
357 PL5P	Pyridoxal 5'-phosphate
358 PDLA5P	Pyridoxamine-5-phosphate
359 4HLT	4-Hydroxy-l-tyrosine
360 PYRDX	Pyridoxine
361 PL	Pyridoxal
362 PDLA	Pyridoxamine
393 SSALTPP	Succinate semialdehyde - thiamine pyrophosphate
397 23DHDHB	2,3-Dihydro-2,3-dihydroxybenzoate
398 23DHB	2,3-Dihydroxybenzoate
399 23DHBA	2,3-Dihydroxybenzoyl-adenylate
400 SERA	L-Seryl-adenylate
401 ENTER	Enterochelin
402 OGT	Oxidized glutathione
404 DHPP	Dihydroneopterin phosphate
410 HBA	4-Hydroxy-benzyl-alcohol
411 CHCOA	6-Carboxyhexanoyl-coa
414 DX5P	Deoxyxylulose-5-phosphate
415 SAMOB	S-Adenosyl-4-methylthio-2-oxobutanoate
5 T3P2/DHAP	Dihydroxyacetone phosphate
6 T3P1	Glyceraldehyde 3-phosphate
11 PYR	Pyruvate
12 ACCOA	Acetyl-CoA
75 GL3P	Glycerol 3-phosphate
275 MALCOA	Malonyl-CoA
276 MALACP	Malonyl-ACP
277 ACACP	Acetyl-ACP
278 C141ACP	β -Hydroxymyristic acid
278 C-----ACP	CH ₃ -(CH ₂) _x -CO-CH ₂ -CO-S-ACP
278 C181ACP	cis-Vaccenic acid
278 C140ACP	Myristic acid
278 C160ACP	Palmitic acid
278 C161ACP	Palmitoleic acid
279	CH ₃ -(CH ₂) _x -CHOH-CH ₂ -CO-S-ACP
280 23DACOA	2,3-Dehydroacyl-CoA
280 OACOA	3-Oxoacyl-CoA
280 AACCOA	Acetoacetyl-CoA
280 ACOA	Acyl-CoA
280	CH ₃ -(CH ₂) _x -CH=CH-CO-S-ACP
280 LCCA	Long-chain carboxylic acid
280 HACOA	Hydroxyacyl-CoA
281	CH ₃ -(CH ₂) _x +2-CO-S-ACP
283 AGP	1-Acylglycerol 3-phosphate
284 DGR	D-1,2-Diacylglycerol
285 PA	Phosphatidyl acid
286 CDPDG	CDP-1,2-Diacylglycerol
287 PS	Phosphatidyl serine
288 PE	Phosphatidyl ethanolamine
289 PGP	L-1-Phosphatidyl-glycerol-phosphate
290 PG	Phosphatidyl glycerol

291 CL	Cardiolypin
292 IPPP	Isopentyl pyrophosphate
293 DMPP	Dimethylallyl pyrophosphate
294 GPP	trans Geranyl pyrophosphate
295 FPP	trans, trans Farnesyl pyrophosphate
296 OPP	trans Octaprenyl pyrophosphate
297 UDPP	Undecaprenyl pyrophosphate
3 F6P	Fructose 6-phosphate
10 PEP	Phosphoenolpyruvate
30 RL5P	Ribulose 5-phosphate
33 S7P	sedo-Heptulose
48 UDPG	UDP Glucose
50 G1P	Glucose 1-phosphate
79 GA6P	D-Glucosamine
85 GLU	Glutamate
89 DALA	D-Alanine
278 C-----ACP	CH ₃ -(CH ₂) _x -CO-CH ₂ -CO-S-ACP
285 PA	Phosphatidyl acid
363 GA1P	Glucosamine 1-phosphate
364 UDPNAG	UDP N-actyl glucosamine
365 UDPG2AA	UDP-3-O-(3-hydroxytetradecanoyl)-N-acetylglucosamine
366 UDPG2A	UDP-3-O-(3-hydroxytetradecanoyl)glucosamine
367 UDPG23A	UDP-2,3-bis(3-hydroxytetradecanoyl)glucosamine
368 LIPX	Lipid X
369 DISAC1P	Lipid A disaccharide
370 LIPV	Lipid IV(A)
371 KDOLIPV	(KDO)-lipid IV(A)
372 K2LIPV	(KDO(2))-lipid IV(A)
373 LIPA	(KDO(2))-lipid A (Endotoxin)
374 CMPKDO	CMP-2-keto-3-deoxyoctanoate
375 KDO	2-Dehydro-3-deoxy-D-octonate
376 A5P	D-Arabinose 5-phosphate
377 CDPETN	CDP-Ethanolamine
378 ADPHEP	ADP-Mannoheptose
379 LPS	Lippolysaccharide
380 UDPNAGEP	UDP-N-acetyl-3-O-(1-carboxyvinyl)-D-glucosamine
381 UDPNAM	UDP-N-acetyl-D-muramate
383 DGLU	D-Glutamate
384 UDPNAMA	UDP-N-acetylmuramoyl-L-alanine
385 UDPNAMAG	UDP-N-acetylmuramoyl-L-alanyl-D-glutamate
386 UNAGD	UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-meso-2,6-diaminoheptanedioate
387 AA	D-Alanyl-D-alanine
388 UNAGDA	UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-meso-2,6-diaminoheptanedioate- D-alanyl-D-alanine
389 PEPTIDO	Peptidoglycan
405 KDOP	2-Dehydro-3-deoxy-D-octonate 8-phosphate
406 UNPTDO	UDP-N-acetylmuramoyl-L-alanyl-D-glutamyl-meso-2,6-diaminoheptanedioate- D-alanyl-D-alanine-diphosphoundecaprenol
NH3	Ammonia

NA	Sodium
O2	Oxygen
PI	Phosphate (inorganic)
PPI	Pyrophosphate
UREA	Urea
OAHSER	O-Acetyl-L-homoserine
SLA	Sialic acid
NAMAN	N-Acetylneuraminate
FRDX	Oxidized ferredoxin
FRDXH	Reduced ferredoxin
MTHGXL	Methylglyoxal